

25 August 2010 R/V Ferrel Status Report, Cruise 8 – Day 2

Compiled by Zach Weber, Chief Scientist

1.) Site Conditions, Daily Activities and Sampling Locations

The Ferrel spent the day approximately 138 miles South West of the MC-252 wellhead conducting casts along transect 10 as directed in the Mission Guidance. The Ferrel arrived to its first sample location at 0650 135 miles South West of the wellhead and sampled two locations: Transect 10 Station 19 and Transect 10 Station 20. Average weather conditions: Air Temperature 83 degrees Fahrenheit, seas 3-4ft, current 1kt out of West, winds 10-15kts out of the North West, and cloud coverage remained around 100% with scattered rain storms throughout the day. The two CTD casts were undertaken to try to locate and sample remnants of the dispersed oil plume that may be around the 1150m depth but no evidence showing impact deeper than 1400m as indicated by a dip in dissolved oxygen levels and a rise in fluorescence in the water column. The cast (T10 S19) was conducted in water exceeding the total recommended CTD cast depth. The cast showed no visible peak in fluorescence, but did show a slight depression in dissolved oxygen. The cast (T10 S20) was conducted in water exceeding the total recommended CTD cast depth. The cast showed no visible peak in fluorescence or depression in dissolved oxygen. Field analyses included dissolved oxygen, fluorescence, temperature, pH and salinity. Water samples were also collected for further chemical and microbiological analyses at three depths on each the two casts (at 750m, 870m, and 950m on cast 1 and 750m, 850m, and 950m on cast 2). In addition, surface water samples were collected for microbiological analyses at both locations.

The results of the CTD casts were:

Station	Position from wellhead	Fluorescence signal	Signal depth	Comment
BP-TN15-SS04 (T10 S19)	135 miles SW	None	N/A	DO decline with a narrow depression of <0.1 mg/l at 870m. Total CTD cast depth 1500m.
BP-TN15-SS05 (T10 S20)	140 miles SW	None	N/A	No DO depression. Total CTD cast depth 1500m.

2.) Air Quality

Not required.

3.) Science Crew

Name	First Name	Affiliation	Role
Weber	Zach	CTEH	Chief Scientist
Weiland	Corey	Entrix	Water Sampler
Pelling	Ray	Entrix	Water Sampler
Smith	Craig	C&C	Party Chief Team
Burke	Emily	C&C	Oceanography Team
McLeod	Alex	C&C	Oceanography Team
Tidwell	Hearn	SHAW	Microbiologist
Reid	Francine	LBNL	Microbiologist
Summers	Kaitlyn	NOAA	Data Manager

